# **Dynamics and Life Course Patterns of Food Assistance Program Participation**

### **Estimating the Probabilities and Patterns** of Food Stamp Use Across the Life Course

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The Food Stamp Program (FSP) is the largest U.S. food assistance program. With some exceptions, the FSP is available to all households for which income and assets fall below certain levels. Information is already available on the extent to which households rely on the FSP during a given year. However, much less is known about how households use food stamps over the course of many years. Rank and Hirschl estimated the lifetime probabilities and patterns of food stamp use for the U.S. population, using a life table procedure. This approach provides empirical evidence on the range and scope of the FSP in the lives of Americans.

The authors used the Panel Study of Income Dynamics (PSID), a longitudinal survey of a representative sample of U.S. individuals and their families. They merged 30 waves of data from 1968 to 1997 to build a series of life tables detailing the cumulative probabilities of participating in the FSP. They examine two periods of the life course—childhood (ages 1-20) and working-age adulthood (ages 20-65). Within each of these periods, they estimated the overall likelihood of food stamp use, the total and consecutive number of years that food stamps are accessed, and the effects that race, education, gender, and marital status have upon the likelihood of using the FSP.

The results indicate that food stamp use is quite common during both childhood and working-age adulthood: 49 percent of American children receive food stamps at some point by the time they reach age 20, and 51 percent of American adults participate in the FSP sometime between the ages of 20 and 65. Furthermore, once a household uses food stamps, it is quite likely to use the program again. Two-thirds of children who receive food stamps will do so in at least one additional year, while three-quarters of adults who use the program will do so more than once.

The results further indicate that food stamp use across the life course tends to occur over relatively short periods of time. For example, while half of all children receive food stamps some time before age 20, only 1 in 10 will do so in 5 consecutive years. These findings are consistent with earlier work examining the life course patterns of poverty, as well as the bulk of research examining the dynamics of poverty and welfare use. Although some households use food stamps for long periods of time, most food stamp users rely on the FSP to provide short-term assistance.

In this study, race, education, and marital status profoundly affect the probability that a person will use food stamps during his or her lifetime. Black Americans, people who have not graduated from high school, and children residing in nonmarried households have a high probability of using food stamps over the course of their lives. For example, 90 percent of Black children use food stamps at some point during their childhood compared with 37 percent of White children.

Study results indicate that a wide segment of the American population uses FSP some time during their lives. However, because different households participate in different years, more households participate at some point over a period of several years than participate in any 1 year. While roughly half of American children and half of working-age adults participate in at least 1 year, most FSP participants use the program for short-term assistance.

## **Food Stamp Program Participation Dynamics in U.S. Counties and States**

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The Food Stamp Program (FSP) and cash assistance caseloads have fallen dramatically since the mid-1990s, and the rate of caseload decline differs across States and counties. Prior research on cash assistance and FSP caseload declines focused on the effect of macroeconomic changes, such as changes in Statelevel unemployment rates. This study examined the factors associated with caseload declines, accounting for economic conditions and demographic characteristics at the county level, and for employment conditions in the labor markets that are most likely to employ former welfare recipients.

In their analysis, the authors used county-level data on economic conditions, which provided more reliable

information than State-level data about the employment prospects of former welfare recipients. In addition, they accounted for employment conditions in the foodservice and retail sectors, in which former welfare recipients are most likely to find jobs.

The authors used estimation techniques that accounted for the spatial clusters of program participation, as well as the direct effect that welfare reform has on labor market conditions. The authors found that higher county-level earnings per capita were associated with a more rapid decline in per capita FSP spending between 1995 and 1999, while county-level retail employment growth did not appear to have an effect on the decline in spending. Reductions in food stamp payments per capita were lower in rural counties than in suburban counties. In counties with proportionally more foreignborn and African-American residents, per capita FSP spending fell more quickly. In counties with proportionally more single female-headed households, per capita FSP spending fell more slowly. A greater number of vehicles per household and more bus services per person in a county were associated with a more rapid decline in FSP spending.

The study results suggest that both individual- and community-level factors play a role in explaining changes in FSP participation over time. Further, the way that community-level factors are measured is critical, as is controlling for the spatial clustering of program participation. Finally, per capita FSP spending falls less rapidly in rural counties than in suburban counties, suggesting a systematic difference in the processes that affect food stamp use in rural and suburban counties. The authors noted that the study findings can be used in forecasting fiscal outlays as economic conditions change and measuring the effectiveness of the FSP.

### The Dynamics of Prenatal WIC Participation

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The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) provides food vouchers, nutritional counseling, and health care referrals to low-income pregnant and breastfeeding women and their young children. This study analyzed the characteristics that affect the probability of WIC participation over the course of a woman's pregnancy. Understanding the program rules and other factors that affect the timing and duration of WIC participation can help to ensure that the program is designed to target resources most effectively.

Although many studies have examined the effect of WIC participation on various health outcomes, relatively little research has focused on the decision to participate in WIC and none have modeled the decision of when to participate. One study provided descriptive information about the month at which participation begins and the number of months of participation, and a number of other studies explored the role of early versus late participation in WIC on birth outcomes. Another recent study, as part of an analysis of health outcomes associated with participation, estimated a simple equation to explain WIC participation.

In this study, the author used data from the 1988 National Maternal and Infant Health Survey, a nationally representative sample of women who experienced a live birth or infant death in 1988, and information about State WIC policies from the 1988 Survey of WIC Program Characteristics. The WIC program data include information on State-level program rules, which varied significantly across the States in 1988. The State-level differences helped the author to assess which program characteristics are important determinants of early participation in WIC.

The study used both parametric and nonparametric hazard rate analysis to examine the relationships among recipient characteristics, WIC program rules, and the timing of WIC participation. These techniques relate maternal, family, and program characteristics to the likelihood that an eligible woman begins participating in WIC during each month of pregnancy, given that she has not participated in the previous months of pregnancy.

The analysis shows that WIC participation is higher among women who have low education levels, are Hispanic, have low income (even among those who are eligible), and participate in other welfare programs. The probability of participating in WIC increases during the first 4 months of pregnancy and decreases thereafter. Women who have participated in WIC during a previous pregnancy are three times more likely to participate in WIC than women who have not participated in the past. The author noted, however, that this result should be interpreted with caution because of limitations on the information in the survey about previous WIC participation.

The study also found that State-level program characteristics are important determinants of WIC participation. Women in States that allow applicants to self-report their income when determining eligibility are 30 percent more likely to participate in WIC than women in States that require applicants to provide documentation of their income. In addition, the Statelevel policy to offer adjunctive eligibility for WIC to Medicaid and cash assistance recipients is associated with a 10- to 20-percent increase in the likelihood of WIC participation.

Recent policy changes have mandated documentation of income for eligibility determination and have expanded adjunctive eligibility. Given the estimates of this study, these policies have opposite effects on participation. Restricting the ability of applicants to self-declare income decreases the probability of WIC participation, and mandating adjunctive eligibility increases it. The author simulated the effects of these policy changes and found that the net effect is a 1-percentage-point increase in the probability of WIC participation over the course of a 40-week pregnancy.